

## Notes from the 10/11/05 MI BPM Upgrade Meeting

Bob Webber

These notes can be found (eventually) in Beams docDB #1526.

### Agenda as announced:

Project Announcements : Bob and Steve  
Combiner Board status : Tim, Bob Forster, Vince  
VME crate purchase status : Bob Forster  
MI30 status : Peter, Bob Webber  
Transition Board status : Manfred  
Service Building survey/BLM coordination : Tim, Marv  
Front-end software : Luciano  
MVME processor status : Luciano Margaret, Steve  
Online software : Brian  
Validation: Rob Kutschke  
MI BPM requirements/MI issues : Dave and Alberto  
Timing Board : Bill  
AOB

#### 0. Announcements - Bob and Steve

- A transition board and timing board mini-review will be held on Wednesday October 12 at 1:00 P.M. in the Cooler (Booster Tower East). All are invited. <http://projects.fnal.gov/mibpm/wbs/reviews/>
- Bob and Steve reiterated the goal to have a "final hardware/functional software" system installed, tested, and operating as replacement for at least one MI BPM "house" no later than January 15, 2006.
- Alberto Marchionni/Dave Capista will identify soon which existing MI BPM "house" will be first replaced.
- A discussion of front-end software issues was held last Friday. A schedule with releases, capabilities, and dates was shown by Luciano later in the meeting.

#### 1. Combiner board status - Vince, Tim

- No new information. Vince will investigate. If there are actions we can take to help protect us (like ordering parts ourselves) we should consider doing so.

#### 2. VME crate purchase status : Vince, Bob

- Still in bid. We should consider closing the bid process as soon

as possible (working with Procurement).

### 3. MI30 status : Manfred, Peter, Charlie, Duane

- Nothing new since last week. There is a plan to make measurements with the new prototype transition module. Other measurements will be made as appropriate and as the system is ready to do so.

### 4. Transition Board status : Manfred

- Manfred is preparing for the mini-review.
- A change was made recently to one of the op-amps. This change was required because of behavior seen in testing.
- There is tentative plan to have small review of transition board design on October 12.
- Schematics, parts list, etc. are all being prepared. There is a tentative decision to build 75 boards (this includes sufficient spares). For the Jan 15 setup we will need to instrument 12 BPM's. This will require 3 boards.
- We also discussed the crates (6U) that the transition boards will sit in. We need to specify and purchase the crates and the power supplies (and cables). Lots of things to deal with.

### 5. Front-end software : Luciano, Steve F., Margaret

- Still having problems with closed orbit measurements on the FCC test stand.
- Luciano showed a schedule (found in beams-doc-1985). We will be reviewing that schedule every week to track progress.
- There has been some discussion of an "R25" like page as well as I6 page changes.

### 6. Service Building survey/BLM coordination : Marv, Jonathan Lewis

- We had a special guest (Jonathan Lewis) come to discuss the installation and placement of the upgraded BPM and BLM hardware in the MI service buildings. Marv showed some options for BPM and BLM placement in various service buildings. His slides can be found in beams-doc-1822 and will be updated as Marv explores various options.

- There are various options for installation in the MIxx buildings. We can install the upgraded BPM systems first, leaving the multibus and BLM as is, or the BLM can be installed first, or some interleaving could occur. Given the timescales we do need to prepare for all options and keep in communication with BLM folks so that the proper accommodations are made and critical systems can remain functioning.

#### 7. MVME processor status : Luciano, Steve

- Enough confidence has been gained with the 5500 that the purchase order for 11 boards (7 + 4 spares) has been written and entered into the system. The PMC cards needed will also be acquired.

#### 8. Online software : Brian

- Working and thinking about various aspects of the upgrade, including diagnostics page, installation strategy, etc.

#### 9. MI BPM requirements/MI issues : Dave and Alberto

- Working on the next (final?) update of the requirements document. Should be released the middle of next week (October 19).

#### 10. Timing Board : Bill Haynes

- The drawings and hardware design is essentially finished. Will be reviewed on Wednesday.

- Work continues on the firmware for MDAT and BSYNC decoding. There was some discussion of the schedule - when we need new boards for bringing up new systems and meeting our Jan 15 schedule for a working system in one of the MIxx buildings.

#### 11. Rob Kutschke : Validation

- Rob is able to run a console with the newest Scientific Linux. Others may have to or may already have dealt with this issue.